LEEVILLE

LOCATION The EMU encompasses the Leeville Oil Field and is bounded on the north and the east by the South Barataria EMU on the south by the South Barataria, Fourchon, and Raccourci EMU and on the west by the Raccourci EMU Bayou Lafourche bisects this EMU.

SOILS Host of the EMU has soils similar to other southerly units. Soils are highly organic with layers of peat of varying thicknesses underlain by soft, dispersed saline clays and mucky clays. When flooded, some organic layers separate from the clay substrate and float. Immediately along Bayou Lafourche, a remnant low natural levee exists with somewhat better soils, including silts and clays. In the southerly part of the study unit levee soils may be buried under marsh deposits.

VEGETATION: Almost exclusively salt marsh. Areas of woody vegetation occur along the natural levee and along spoil banks that parallel numerous canals in the study unit.

SUBSIDENCE POTENTIAL IF DRAINED: Very High (51 inches plus) for all of the area except a small strip along Bayou Lafourche.

LAND LOSS POTENTIAL DUE TO CHANNEL CONSTRUCTION: High. Soils in the area have properties which make them highly susceptible to erosion due to channel construction. Most channel construction in the area has been due to mineral extraction. The area is now laced with canals mainly associated with the Leeville Oil Field.

DATA ON LEEVILLE OIL FIELD First oil well drilled 1921 Number of oil wells drilled 442 Oil Production peaked 1967 Life of wells - Liquids 16.9 years Gas S.7 years

More drilling anticipated in the next few years.

TOPOGRAPHIC FEATURES: Area is mainly salt marsh. The only relief occurs as artificial embankments and fill near Highway 1, the low natural levee in the northern end of the study unit, and some spoil banks along rig access canals in the Leeville Oil Field. Highest marked elevation is plus six (6) feet MSL on a spoil bank in the unit. The land in the rest of the study unit is below plus five (5) feet MSL and most is at or near sea-level.

FLOODING POTENTIAL: Entire area is subject to flood tides from the Gulf of Mexico during storms. Since there are no extensive levees, the entire study unit is subject to wind and water damage.

IMPORTANT FARMLANDS: None.

USE OF LAND: Oil and ~as extraction is the principle use of the area.

Wetlands have been severely altered due to dredging for energy activities. Most structures along Highway 1 are directly associated with oil and gas activities. The

Leeville area is a permanent resident settlement. There are also some hunting and fishing camps found in the unit. Leeville provides an important staging area for supply of necessary equipment to OCS activities. It also serves as an important evacuation area during hurricanes.

UNIQUE ECOLOGICAL FEATURES: None.

RECREATIONAL POTENTIAL: Hunting and fishing occur in area. Highway 1 and canals provide access into marshlands, and to the Gulf for-hunting and fishing. Crabbing and fishing are also popular along the highway.

HYDROLOGIC RESOURCES: There is no readily available supply of fresh drinking water for Leeville. Residents rely on the pumping of water into Bayou Lafourche from the Mississippi River.

HISTORIC/CULTURAL/ARCHEOLOGICAL:

A. Historic Sites: Leeville is of historic interest. At one time, in the early part of the century, the area was populated by people moving up from Grand Isle and Chenier Caminada after disastrous hurricanes. Later storms drove many of Leeville's settlers further up the coast to Golden Meadow. A cemetery of historic interest is located at Leeville. Other old cemeteries along Bayou Lafourche are being washed away.

B. Cultural: At one time, orange groves were found in the area around Leeville along Bayou Lafourche. These groves disappeared as the soil subsided.

C. Archeological Sites

LF 50 Known Shell Midden on Bayou Lafourche

LF 52 Known Shell Midden on Bayou Lafourche

GOALS

1. Reduce erosion and new channelization in the entire EMU
2. Rebuild marshland in the wetlands of the EMU wherever feasible by mitigation conditions applied to new Coastal Use Permits issued in these areas
3. Use spoil for maintenance dredging in rebuilding marshlands of this EMU
4. Discourage new dredging that destroys marshland whenever possible in this E..~.U.
5. Encourage continued industrial concentration in the Leeville area

This EMU is almost exclusively wetland, salt marsh. The only high ground is the strip along Louisiana Highway 1 and fill areas in and near Leeville. The entire EMU is severely cut up with oil and gas canals and is eroding badly. The Hackberry Bay Oil Field covers the entire EMU.

POLICIES FOR LEEVILLE EMU

POLICY 1. All General Policies for the Lafourche Coastal Zone shall apply in this EMU unless modified by specific EMU or sub-EMU policies stated in this EMU policy statement.

POLICY 2. In the entire EMU exclusive of the high strip of Louisiana Highway 1 and Leeville all permits for dredging and filling activities should require that dredged materials shall be spread so as to create new marsh sites whenever possible instead of placing spoil on adjacent wetlands unless otherwise stated. This means placing spoil in eroding wetlands so as to create new sites for marsh regeneration.

POLICY 3. Existing canals should be used wherever possible to access new drilling in the oil fields occurring in this EMU New drilling should be kept to an absolute minimum and subject to conditions stated elsewhere in these policies.

POLICY 4. If new canals are to be dredged in the wetland portion of this EMU it should be demonstrated that no alternative utilizing existing waterways is possible and/or it is economically not feasible to use techniques such as directional drilling to avoid unnecessary destruction of marshland.

POLICY 5. Whenever feasible, spoil obtained from maintenance dredging of existing canals should be spread so as to create new marsh sites in the general area of the dredging activity.

POLICY 6. In some cases, where large amounts of dredging create new channels, spreading and vegetation of new spoil areas may be required of permit applicants after completion of dredging projects.

POLICY 7. Permanent human residential habitation should be discouraged throughout this EMU due to problems of storm flooding, wind damage, and lack of adequate public utilities. Recreational camps are encouraged provided provision is made for adequate disposal of solid waste and sewerage effluent as per parish and state health regulations.

POLICY 8. Existing reclaimed sites along Bayou Lafourche should continue to be utilized for industrial expansion. Concentration of support activities is desirable due to the greater ease of providing public services to an area such as Leeville. Industrial expansion should only be undertaken if provision is made for adequate solid waste, sewerage, and any industrial waste is provided for as per parish and state regulation.

POLICY:9. Further reclamation for the purpose of industrial expansion should be discouraged if alternate sites are available on already reclaimed areas. If reclamation is necessary, then mitigation measures such as spoil spreading and marsh vegetation should be undertaken by the permit applicant in other areas as determined by the Permit Administrator and State CZM Program.

POLICY 10. As a possible mitigation measure for permit applicants the dismantling and cleaning of Bayou Lafourche of pilings, support platforms, sunken boats, etc. shall be considered so as to maximize use of Bayou Lafourche as a valuable navigation channel.

POLICY ll. There shall be no illegal dumping in this EMU of any liquid or solid waste. Existing tank storage sites and well sites shall follow all applicable guidelines as specified by the Louisiana Department of Natural Resources regarding the storing and disposal of wastes from mud pits, well construction, etc.

Besides these guidelines, all coastal use guidelines as stated in the F.E.I.S. of the Louisiana Coastal Zone Management Program shall apply to this EMU

Where EMU policies refer to a "use of state concern", the policies are intended only as recommendations to the state program managers and are not legally binding on the permit applicant or the state CZM program.